

IN THE CLAIMS

The following claims listing replaces all prior claims listings:

1. (Currently Amended) A sensor device ~~for measuring~~which measures changes in a detecting portion upon coupling with a system containing at least two targets ~~target~~, the sensor device comprising:

a sensing portion including ~~one of~~ an oscillating circuit and a frequency measuring device ~~or~~ in combination with a surface plasmon resonance circuit; and

a detecting portion having a plurality of binding sites, each binding site permitting one type of a plurality of different types of the targets to selectively couple therewith, wherein,

the sensing portion extracts plural pieces of information including information about at least the presence, absence, or distribution of ~~the~~ each type of target via coupling of ~~the~~ each target with the detecting portion which is effective to determine if a steric hindrance exists, and

the sensing portion extracts said information by measuring changes in the weight of the detecting portion upon coupling with the targets.

2.-4. (Canceled)

5. (Previously Presented) The sensor device according to claim 1 wherein the binding sites couple with the targets to detect changes in amount of the targets with time.

6. (Original) The sensor device according to claim 1 wherein said information is extracted by measuring changes in physical nature or structure of the detecting portion upon coupling with the targets.

7. (Original) The sensor device according to claim 1 wherein said information is extracted by measuring changes in dielectric constant of the detecting portion upon coupling with the targets.

8.-11. (Cancelled)

11. (Previously Presented) The sensor device according to claim 3 wherein the targets are antigens and binding sites are antibodies, and the antigens and the antibodies couple by antigen/antibody reaction.

12. (Currently Amended) A sensing method for measuring changes in a system containing at least two targets ~~target~~ upon coupling with a detecting portion, comprising:

selectively coupling the ~~target~~ targets to one of a plurality of binding sites on the detecting portion;

extracting information including information about at least the presence, absence, or distribution of each of the targets ~~target~~ via coupling of the ~~target~~ targets with the detecting portion using a sensing portion which includes ~~one of~~ an oscillating circuit and a frequency measuring device ~~or in combination with~~ a surface plasmon resonance; and

determining if a steric hindrance exists due to a change in presence, absence, or distribution of each of the targets over time,

wherein,

the sensing portion extracts said information by measuring changes in the weight of the detecting portion upon coupling with the targets.

13. (Currently Amended) A biological substance sensor device for measuring changes in a biological substance containing at least two targets upon coupling with a detecting portion, the biological substance sensor device comprising:

a sensing portion including ~~one of~~ an oscillating circuit and a frequency measuring device ~~or in combination with~~ a surface plasmon resonance; and

a detecting portion,

wherein,

the biological substance sensor device simultaneously extracts plural pieces of information including information about the, presence, absence, or distribution of the ~~biological substance~~ targets via selective coupling of the ~~substance~~ targets with the detecting portion which is effective to determine if a steric hindrance exists, and

the sensing portion extracts said information by measuring changes in the weight of the detecting portion upon coupling with the targets.

14. (Currently Amended) A biological substance sensing method for measuring changes in a biological substance containing at least two targets upon coupling of the biological substance with a detecting portion, comprising:

providing the biological substance for coupling with the detecting portion;

simultaneously extracting plural pieces of information including information about at least the presence, absence, or distribution ~~each of the targets of the biological substance~~ via selective coupling of the ~~substance~~ targets with the detecting portion using a sensing portion which includes ~~one of~~ an oscillating circuit and a frequency measuring device ~~or in combination with~~ a surface plasmon resonance, and

determining if a steric hindrance exists due to a change in presence, absence, or distribution of each of the targets over time,

wherein,

the sensing portion extracts said information by measuring changes in the weight of the detecting portion upon coupling with the targets.

15. (Currently Amended) A secretion sensor device for measuring changes in a secretion product upon coupling with a detecting portion, the secretion sensor device comprising:

a sensing portion including ~~one of~~ an oscillating circuit and a frequency measuring device ~~or~~ in combination with a surface plasmon resonance

a detecting portion,

wherein,

the sensing portion extracts plural pieces of information including information about the presence, absence, or distribution of the secretion product via selective coupling of the product with the detecting portion which is effective to determine if a steric hindrance exists,

wherein,

the sensing portion extracts said information by measuring changes in the weight of the detecting portion upon coupling with the targets.

16. (Currently Amended) A secretion sensing method for measuring changes in a secretion product containing at least two targets upon coupling with a detecting portion, comprising:

providing the secretion product for coupling with the detecting portion;

simultaneously extracting plural pieces of information including information about at least the presence, absence, or distribution each of the targets of the secretion product via selective coupling of the ~~secretion product~~targets with the detecting portion using a sensing portion which includes ~~one of~~ an oscillating circuit and a frequency measuring device ~~or in~~ combination with a surface plasmon resonance, and

determining if a steric hindrance exists due to a change in presence, absence, or distribution of each of the targets of the targets over time,

wherein,

said information is extracted by measuring changes in the weight of the detecting portion upon coupling with the targets.

17-18. (Cancelled)